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ABSTRACT

The Faculty of Education of the University College of Wales is responsible for the initiation and coordination of research on the bilingual situation of Wales. This pamphlet outlines a program of work for this research. It is intended to show the individual researcher the overall aims and problems of the program and to suggest specific research topics. The introduction is divided into the following sections: (1) reasons for the research program; (2) the scope of research work; (3) need for realistic, rather than academic, to be researched; (4) special educational problems in a "mixed language" area; (5) standardized tests of intelligence and attainment and quantitative measures of Welsh linguistic background; (6) order of priority; and (7) research by groups of teachers. The main areas of investigation for the program have been divided into three: (1) the development of tools, for a reliable investigation, e.g., standardized language and intelligence tests; (2) the undertaking of studies using the tools to assess relationships between Welsh linguistic background and educational attainment, assess efficiency of alternate methods of language teaching, and survey general attitudes toward the bilingual situation; and (3) the initiation of projects connected with material development, student placement, national education objectives, reading surveys, and school conditions. (TL)

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UNIVERSITY COLLEGE OF WALES
ABERYSTWYTH

FACULTY OF EDUCATION

A REVIEW OF PROBLEMS FOR RESEARCH INTO BILINGUALISM AND ALLIED TOPICS

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Pamphlet No. 1

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UNIVERSITY COLLEGE OF WALES
ABERYSTWYTH

Collegiate Faculty of Education

A REVIEW OF PROBLEMS FOR RESEARCH
INTO

BILINGUALISM A[illegible] ALLIED TOPICS

WELSH GAZETTE, ABERYSTWYTH

FOREWORD

This document, issued on the authority of the Faculty of Education, is based on the programme circulated by the Faculty in 1951 to its members and to the University of Wales School of Education. As a result of investigations by the Research Assistant (Mr. Dyfnallt Morgan) into the language position of the schools in the Faculty Area, and the detailed work of the Advisory Officer (Mr. A. Pinsent) in the formulation of problems, the Faculty considered it advisable to publish a revision in the form of this present survey.

Not only will this serve as a programme of work for the College Area as opportunities arise, but it is believed that it will serve as a valuable 'blue-print' for all research work connected with bilingualism in Wales. So much has been written in general terms about two-language teaching and learning that a planned 'lay-out' of the problems involved is timely and salutary. Workers, too, in the field will be helped in finding specific projects suggested and in seeing how their work can be co-ordinated.

IDWAL JONES
Dean of the Faculty

20 *February*, 1953.

Introduction

The research programme set out in the second part of this memorandum has been developed with the following considerations in view:—

(a) *Reasons for the Research Programme*

The functions of the Collegiate Faculties of Education include the initiation and co-ordination of research.

The Collegiate Faculty at Aberystwyth covers an area which is largely bilingual and rural. It seems appropriate, therefore, that its research work should be devoted primarily to investigations into problems of bilingualism and of rural education.

A bilingual policy has been adopted for Welsh schools by the Ministry of Education and by Local Education Authorities. The need for information and guidance in connection with this aspect of education has been emphasised by Directors of Education, H.M. Inspectors, and representatives of practising teachers in the Faculty Area. Moreover, two supplementary courses have been established by this Faculty, namely, Rural Science at Trinity College, Carmarthen, and Bilingual Studies at the University College, Aberystwyth. The research programme which follows is relevant to both these courses.

The programme has been expressed in some detail for the following reasons:—

(i) the general topic, "Bilingualism," is far too complex and too vague to admit of experimental treatment. In order to make an effective attack on it the general topic needs to be broken down into definite problems each with a more restricted scope.

(ii) it is hoped that not only full-time research assistants and university research students but also practising teachers interested in Welsh education will take part in the work. One reason for a detailed programme is that suggestions of a variety of definite topics for investigation may encourage practising teachers as well as full-time research workers to undertake research.

If some workers can be encouraged to take up a variety of allied problems, their work will be made more effective by

some measure of co-ordination. The programme as a whole is intended to fulfil this co-ordinating function as well as to suggest particular problems for investigation.

(b) *The scope of research work*

Research work may legitimately include:

(i) experimental investigations ;

(ii) surveys of conditions as they exist at the present time ;

(iii) historical studies ;

(iv) the collection and arrangements of bibliographies and other source material for ready reference by research workers and teachers.

Items (i) and (ii) above normally require special techniques and research " tools " for satisfactory results. However, items (iii) and (iv) and certain problems in item (ii) can be worked without special techniques. The programme includes possible projects of both types, i.e. some which do, and others which do not require special research " tools."

(c) *Need for realistic problems*

It seems desirable in the case of urgent problems such as bilingualism in relation to education that the topics suggested for investigation shall be not merely exercises in research techniques but also topics which have a close connection with practical everyday difficulties in educational administration and teaching. In order that the research programme may be as " realistic " as possible, it has been developed from a preliminary survey of bilingual problems as they have been stated or implied by administrators and teachers in the Faculty Area.

(d) *Special Educational Problems in a "Mixed Language" Area*

The most urgent problems in the practical field of Welsh education at the present time are said to be (in summary form):

(i) clear definitions of terms, e.g. What should be understood *exactly* by " bilingual," " language mixture," " standard " Welsh, " dialect " and " dialect area," " colloquial " Welsh, " debased " Welsh? Most of the investigations into and discussions about bilingualism, up to date, have been vitiated or completely invalidated by the lack of accurate definition and, above all, quantitative estimation of the influence of varying degrees of bilingual background and bilingual attainment. Quantitative methods may not be sufficient to supply complete answers to all the questions involved in bilingualism but without adequate quantitative treatment many such questions cannot be answered satisfactorily.

(ii) clear statements of what should be the aims of teaching second languages, e.g. Welsh to English-speaking pupils and English to Welsh-speaking pupils.

(iii) surveys, by means of standardised tests, of the distribution of educational attainments in the basic subjects, i.e. Welsh, English, Arithmetic, in pupils with varying degrees of bilingualism. (What are the effects of bilingual conditions on educational development?)

(iv) estimation of the comparative efficiency, in bilingual districts, of administrative methods of selecting pupils for admission at the age of 11+ to secondary education, and for classifying pupils after admission.

(v) estimation of the comparative efficiency with respect to language learning of alternative methods of school organisation and teaching, and of alternative curricula, for children of varying ages, innate capacities, and linguistic background.

(vi) production of graded syllabuses for teachers of Welsh and English as second languages.

(vii) production of graded readers for children learning Welsh as a first language and Welsh or English as a second language.

(viii) studies of various effects of learning and using two languages concurrently. Complications may arise when two languages with different accidence, syntax, word order, and idiom must be taught and learned concurrently. The possibility of the mutual interference of the two sets of language habits must be kept in mind. Therefore, in considering efficient methods of teaching and learning in a mixed language area, it is necessary to discover whether any interference does occur, and if so what form the interference takes, and what methods of dealing with the difficulty would seem to be most useful in teaching and learning.

(ix) development of the most effective methods of teaching language to dull and backward children in bilingual areas.

(e) *Standardised Tests of Intelligence and Attainment and Quantitative Measures of Welsh Linguistic Background*

If definitive answers to these problems are at all possible in a mixed language area, then objective studies of mental and linguistic capacities and mental and linguistic development are essential as guides for the establishment of objective criteria of efficiency in place of personal impression and opinion.

These objective studies require, as " tools " of investigation, standardised tests of general ability (verbal and non-verbal) and standardised tests of attainment. Few such tests are available at present in Welsh and the use of translated versions of English tests standardised for English populations is of doubtful validity.

Hence, one primary need at the moment is the production in Welsh of tests of aptitude and attainment correctly standardised by reference to Welsh pupils and conditions.

Further, it has been established that degree of Welsh background significantly affects performance even in the case of the supposed non-verbal tests. It would seem necessary, therefore, to standardise all tests for use in Wales by reference to varying degrees of Welsh background. Hence a fundamental requirement for any attack upon the problems proposed above, in mixed language areas in Wales, is a valid measure of Welsh background. With respect to this problem of estimating degree of Welsh background, it is desirable to note here that the term " Welsh background " stands for a very complex situation which includes not only linguistic, but also cultural and emotional components. However, the immediately urgent practical objective of the first part of this research programme is to assist educational administrators and teachers to deal with bilingualism as it affects school organisation and teaching methods. It seems best, therefore, to concentrate first upon the linguistic factors of the Welsh background. At the same time the wider issues can be kept in mind and investigated as and when opportunities arise.

(f) *Order of Priority*

In the arrangement of the programme some attempt has been made to indicate the relative urgency and, therefore, order of priority of the investigations. It is obvious that the preparation of necessary " tools " for research must take precedence over investigations requiring their use. When the necessary " tools " have been constructed, the next most urgent need is a systematic study of the development, in " bilingual " pupils, of attainments in the basic subjects, using for this purpose standardised objective tests of attainment.

In the case of topics not requiring special research " tools " an order of priority is not so clearly apparent. Perhaps the most urgent of these is the tabulation of word-frequencies in Welsh.

(g) *Researches by Groups of Teachers*

It is suggested that some of the items listed in section C below could with advantage be undertaken by a group of teachers in a given district.

The Research Programme

A. NECESSARY "TOOLS" FOR INVESTIGATION

Highest Priority

1 (a) Standardisation of tests of general intelligence (non-verbal tests) and tests of educational ability (tests combining verbal and non-verbal items) in Welsh on representative populations of Welsh pupils having varying degrees of Welsh linguistic background.

(b) Development of a reliable quantitative measure of Welsh linguistic background.

2 Construction of standard attainment tests

It is necessary to establish norms of attainment in the basic subjects, i.e. Welsh as first and/or second language, English as first and second language, and Arithmetic (taught through the medium of Welsh/English) for representative samples of pupils with specified degrees of Welsh linguistic background. Tests required include Vocabulary, Reading Accuracy, Reading Comprehension, Spelling, Use of grammatical structure, Mechanical Arithmetic, Problem Arithmetic.

Second Priority

Calibrated scales for the quantitative assessment of degrees of attitude toward English/Welsh in specified groups, e.g. education authorities, parents, teachers, pupils.

B. STUDIES WHICH REQUIRE THE USE OF SPECIAL RESEARCH "TOOLS"

1 (a) *Definition of Concepts*

Accurate definition of such concepts as "bilingual," "mixed language area," "dialect area," "colloquial" Welsh, and their delimitation by means of quantitative measures, e.g. Welsh linguistic background scale, vocabulary tests. Surveys of distribution of types and degrees of "bilingualism" in specified districts using quantitative measures.

(b) *Case Studies*

Case studies of children who appear to have no predominant mother tongue and whose "first language" is difficult or impossible to ascertain. In what ways does this type of language mixture appear to affect the intellectual, educational and emotional development of children having a specified level of educational ability? (Note. These pupils

present practical difficulties in schools if it is necessary to classify them on a linguistic basis, (a) on entry to an infant school, (b) on transfer to a secondary school.

2. *Studies of Intelligence Test Performance in Relation to Degree of Welsh Linguistic Background*

(a) Comparison of correlations between quantitative measures of degree of Welsh linguistic background and scores on certain non-verbal tests of general intelligence, e.g. Progressive Matrices Test, Lee-Jenkins Non-Verbal Test, Jenkins Non-Verbal Test, Daniel's Figure Reasoning Test.

Which of these supposedly non-verbal tests is *most independent* of the influence of Welsh linguistic background? Other things being equal, that test should be the most satisfactory for use in testing general intelligence in a mixed language area.

(b) Systematic study of relation between degrees of Welsh linguistic background and scores on standardised intelligence tests.

At what degree of " bilingualism " does an intelligence test in English handicap a Welsh-speaking pupil, and an intelligence test in Welsh handicap an English-speaking pupil?

What are the effects of different degrees of Welsh linguistic background on pupils' scores on intelligence tests?

3. *Studies of Development of Educational Attainment in Relation to Welsh Linguistic Background*

(a) Systematic studies, by means of standardised tests of educational attainment, of the progress in basic subjects of pupils between 5 and 15 years with varying degrees of Welsh linguistic background. Is " bilingualism " an advantage/disadvantage with respect to attainment in various subjects? This can be restated as follows: What are the facts about the supposed retardation/acceleration of pupils due to " bilingualism," e.g. if the retardation/acceleration is found, then

(i) what is the relative amount.

(ii) is it general or does it apply only to special aspects, e.g. spoken Welsh, written Welsh, reading accuracy, comprehension ; to special cases of schools, pupils, areas (taking account of differences in non-verbal intelligence, cultural background, methods of teaching, etc.)?

(iii) at what ages and in what conditions does the retardation/acceleration appear to be greatest/least?

(iv) are the affects of "bilingualism" permanent or temporary?

(v) what are the characteristics and circumstances of pupils who show retardation/acceleration as compared with pupils who do not?

(vi) what standard of attainment in various aspects of Welsh/English should be required of "bilinguals" in examinations for allocation to secondary education at 11+?

(vii) what are the effects, if any, on educational progress of the transfer of pupils at 11+ from primary to secondary education with particular reference to (a) transfer from rural primary to urban secondary schools, and (b) change in the medium of instruction?

In this connection some further problems of lower priority are :

What progress (a) may be expected, (b) should be required with respect to language attainments in Welsh/English in pupils with specified degrees of Welsh linguistic background and non-verbal intelligence, in specified teaching conditions?

Can the fundamentals of standard Welsh be acquired by Welsh-speaking pupils (all pupils ; some pupils — what proportion ; no pupils) by the age at which authorities recommend/require the introduction of English as a second language? (Note: What are the necessary/desirable fundamentals of Welsh?)

What, if any, is the optimum age for the introduction of a second language? This problem needs a clear statement of what should be the objectives in teaching the second language, e.g. ability in speech, understanding, reading, writing, or some combination of these abilities.

What is the relation of formal grammar to language learning? When should formal grammar be introduced into language syllabuses?

(b) Application of data derived from studies of educational development, and from word-frequency counts to:

(i) production of graded reading books and work-books in Welsh/English as second languages.

(ii) specification of "targets" of attainment in basic language subjects appropriate to the capacity of pupils with varying degrees of linguistic ability and of Welsh background ; incorporation of these "targets" into language syllabuses.

(iii) studies of comparative efficiency of alternative methods of language teaching, including the place of formal grammar, in the case of pupils with varying *mental* ages. (See also section 4.)

(c) Studies of comparative progress in educational attainment of English-speaking pupils in predominantly Welsh-speaking schools and districts.

(d) Investigation of standards of written English achieved by pupils aged 11—12 years and 15—16 years who have varying degrees of Welsh linguistic background and different levels of cultural background and are taught in specified school conditions.

(e) Studies of comparative progress in arithmetic of pupils with different degrees of intelligence and Welsh linguistic background. In this connection:

(i) Should Welsh-speaking children be taught arithmetic in Welsh or English?

(ii) What effects appear to be produced by the medium of instruction on progress in number comprehension?

(iii) Should there be a change of medium of instruction in arithmetic from Welsh to English, and if so at what stage of the course is it desirable?

(iv) If Welsh is to be the medium of instruction in Arithmetic, then properly graded classbooks in Welsh are necessary.

4. *Surveys of and Studies in the Comparative Efficiency of Alternative Methods of Language Teaching*

This problem requires a clear statement of the desirable objectives of language teaching; also consideration of comparative efficiency of methods with respect to (a) immediate learning, (b) retention after a specified period.

It also requires studies in the progressive development of word vocabulary, phrase vocabulary, reading accuracy, comprehension, spelling, etc., in pupils from 5 to 15 years in relation to degree of Welsh linguistic background, cultural background, non-verbal intelligence, verbal intelligence, and specified conditions of teaching.

Under this heading might be included a study of the relation between the time allotted to Welsh/English, and attainments achieved; e.g. it may be that the alleged retardation of "bilingual" pupils is due merely to the fact that he/she spends less learning time in English and Welsh than the monoglot pupil; e.g. what are the comparative results in language attainment of x hours of English + y hours of Welsh; x + y

hours of Welsh only ; x + y hours of some admixture of English and Welsh, in the case of pupils with specified general intelligence, linguistic ability and degree of Welsh background?

Under the heading of comparative efficiency the following factors might be investigated with reference to both primary and secondary stages :

(a) methods of linguistic classification, e.g., streaming according to linguistic ability ; vertical classification according to predominant language ; separate classes or separate schools for Welsh/English in mixed language areas.

(b) teaching methods : formal - informal ; direct method ; dramatic method ; mixed methods ; emphasis on oral work at the expense of written work and reading, etc.

(c) methods of appointing teachers ; language qualifications required e.g. knowledge of Welsh, ability to teach Welsh, ability to teach other than Welsh subjects through the medium of Welsh. What are the optimum qualifications, methods of appointment and employment of teachers in a mixed language area with special reference to second-language teaching?

(d) methods of using teachers for language instruction : class teachers, peripatetic teachers, monoglot English for English as second language, etc.

All the above with respect to size and type of school.

5. *Studies of "Language Mixture" and its Effects on Learning*

(i) Definitions of "language mixture," "colloquialisms," "debased" and "shortened" forms of Welsh speech.

(ii) Analysis of difficulties in learning to speak/write which may be caused by structural differences between Welsh and English, e.g. accidence ; syntax (including clause construction) ; word order ; idiom, etc.

Arising out of this, is it desirable from the point of view of efficiency in learning/teaching to keep the two sets of language habits separate?

(iii) Should non - standard forms of Welsh, e.g. colloquialisms, debased forms, shortened forms, be (a) used in instruction, (b) encouraged in school, (c) tolerated in school, (d) suppressed in school?

Possible immediate effects and after - effects of use, toleration, suppression on a child's ability to learn and willingness to learn ; e.g. what effects may complete

suppression of non-standard forms have on the pupil's spontaneity of expression in speech and/or writing at specified ages?

(iv) Studies in decay of the forms and standards of spoken Welsh/English in a mixed language area, e.g.

What is the extent of decay geographically?

Is it general throughout an area or only in " pockets "?

Do all the people in the area show the decay, or only some people? If the latter, what proportion?

Is there a progressive decay (a) during school life, (b) after school? What are the effects, if any, of age on decay?

Are there specific types of decay? If so, where located; in geographical area, in social status, occupation, etc?

What influences appear to cause decay?

What are possible remedies?

(v) To what extent does " bilingualism " facilitate the acquisition of a third language?

This problem requires comparative studies of language development in monoglot and bilingual (Welsh-English) pupils in relation to the acquisition of a third or fourth language. It is, in fact, a problem in transfer of the effects of training, and factors such as teaching methods as well as general intelligence and linguistic ability of pupils need to be taken into account. (Experimental studies of transfer of the effects of training in other connections suggest that the study of Welsh and English will facilitate the acquisition of further languages only to the extent that certain common language principles exemplified in Welsh and English are made explicitly clear in the teaching and are explicitly realised and applied by the pupils. It follows that the degree of facilitation, if it exists, will depend also on the intelligence of the learners).

(vi) Study of common errors in speaking/writing Welsh/English in relation to dialect area, age, teaching methods, degree of Welsh linguistic background.

6. *Methods of Selection for and Allocation to Types of Secondary Education in Mixed Language Areas*

Studies of the comparative efficiency of various methods of selection for, or allocation to different types of secondary education e.g. secondary grammar, secondary modern. Follow-

up and follow-back surveys of pupils admitted at 11+ to secondary schools, with particular reference to degrees of Welsh linguistic background and the change of medium of instruction from mainly Welsh to mainly English.

7. *Studies of Attitudes and Incentives in Connection with Teaching and Learning Welsh/English*

Effectiveness in teaching and progress in learning are both affected by attitude and incentives. In the appraisal of any teaching or learning situation in connection with "bilingualism," therefore, note must be made of attitudes and incentives. These may play a more prominent part in a bilingual situation since other than intellectual factors are likely to be involved (economic factors for example). Some problems in this category are :

(a) how far is it correct to suppose that the best way of encouraging the learning of Welsh in a non-Welsh-speaking district is to promote the study of Welsh cultural background, history, institutions, etc?

(b) what syllabuses, methods of approach, devices of organisation, teaching methods seem to produce the greatest interest in the Welsh language on the part of non-Welsh-speaking pupils? How can results be *measured*?

(c) the study of examinations as incentives. What are the effects of examination requirements on attitudes toward teaching and learning Welsh/English as second languages? How can examination syllabuses be used to promote the implementation of a language policy? What type of syllabus seems most effective in relation to a given policy?

(d) studies and surveys in specific districts of loyalties, culture conflict, emotional disturbance in relation to bilingualism and to the teaching and learning of English/Welsh. For example, to what extent may the alleged confusion in "bilingual" pupils be ascribed to emotional rather than intellectual difficulties?

(e) studies of attitudes with respect to Welsh/English in specified social and professional groups ; in parents, teachers, pupils.

To achieve satisfactory results in the estimation of attitudes, calibrated attitude scales are necessary. Two investigations only have been published in Wales on the calibration and use of attitude scales in the investigation of attitudes toward language learning. Here is a promising field of research in connection with bilingualism.

C. INVESTIGATIONS — NOT REQUIRING SPECIAL RESEARCH "TOOLS"

1. Studies of word frequencies in Welsh and application of the results to the construction of vocabulary tests, graded readers and work-books.

2. Comparative survey of methods at present in use for selection and allocation of pupils at 11+ to secondary schools. Are intelligence tests used? Are standardised objective tests of attainment used? What examination requirements are specified in Welsh/English. What standards are expected in the basic subjects?

3. What methods of linguistic classification are used in Welsh schools for pupils at varying ages? On what criteria are the classification based?

4. In cases where examinations are used as a basis for selection at 11+, and in connection with the General Certificate of Education Examination, what are the effects of the examination syllabuses on the organisation, syllabuses, and methods of teaching Welsh/English?

(What should be the objectives in teaching Welsh/English as first or second languages at the primary/secondary levels. What changes in examination syllabuses would foster those objectives?)

5. A study of relations between secondary schools and their primary feeder schools with respect to continuity and co-ordination of aims, methods, organisation, and standards of attainment in the Welsh language.

6. A survey of aims, organisation, and teaching methods in Welsh/English in being at the present time, including the qualification and use of teaching staffs (e.g. use of peripatetic teachers).

7. Studies of special problems of two and three teacher schools with particular reference to mixed language areas.

8. A survey of the objectives which guide the teaching of Welsh/English as first/second languages at the primary/secondary schools. A critical appraisal of objectives in the light of present-day conditions. (See also item 4 above).

9. A survey of reading books and work-books at present available for teaching Welsh as first language and Welsh/English as second languages. A critical appraisal in the light of present-day requirement and standards. What are the

desirable characteristics of a satisfactory book for a given purpose? Note the problems of backward readers in secondary schools.

10. Studies of reading habits and reading preferences of Welsh-speaking children, urban/rural, with varying degrees of Welsh cultural and linguistic background, at primary/secondary levels, and in different types of secondary schools.

What effects has transfer to secondary education on reading habits and preferences or rural Welsh pupils?

"Comics." Their influence on language learning.

11. Conditions in the Grammar Schools at the present time with respect to the relation between Welsh, English, Latin and modern foreign languages.

What are the time allotments in grammar schools for Welsh in relation to other language subjects in the case of Welsh-speaking pupils at different levels of general intelligence and educational ability?

12. Studies with a Sociological Emphasis.

(a) Study of social, economic, technical influences on the spread of English in mixed language areas.

e.g. influence of the mechanisation of agriculture; "snob" values; identification by school children of Welsh with "baby talk" because Welsh is the predominant or sole language medium in infants' schools (cf. incentives for language learning).

(b) What are the actual needs for and advantages of facility in a second language, e.g. English for Welsh speakers and Welsh for English speakers, economic, social, cultural, intellectual? How much Welsh/English is necessary after school in various types and levels of occupation?

(c) Survey and critical appraisal of rural education in Wales. Analysis of special problems of rural education in Wales.

(d) Study of effects of school re-organisation on Welsh rural communities.

(e) Follow-up studies of Welsh rural pupils after school-leaving age, e.g. how do pupils from small rural schools compare with pupils from urban schools when intelligence and social status are comparable Advantages/disadvantages of small schools.

(f) Studies of the influence of cultural background on attainment in language subjects when intelligence and verbal ability are comparable.